



## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **10155485 A**(43) Date of publication of application: **16.06.98**

(51) Int. Cl.

**C12N 15/09****A01H 5/00****C12N 5/10****C12Q 1/68****// C07K 14/415****(C12N 15/09 , C12R 1:91 ), (C12N 5/10 , C12R 1:91 )**(21) Application number: **09299278**(22) Date of filing: **26.09.97**(30) Priority: **26.09.96 JP 08255184**(71) Applicant: **KAGAKU GIJUTSU SHINKO  
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KENKYUSHO**(72) Inventor: **KAWASAKI SHINJI****(54) NEW LARGE-CAPACITY BINARY SHUTTLE VECTOR****(57) Abstract:**

**PROBLEM TO BE SOLVED:** To obtain the subject new vector composed of a large-capacity binary shuttle vector containing a T-DNA region and a replication origin having Ri and RK2 and useful for the transformation of a monocotyledon, complementation test analysis of genom function, search for useful gene, etc.

**SOLUTION:** This new large-capacity binary shuttle vector contains a T-DNA region and a replication origin having Ri and RK2 and is useful for the transformation of a

seed plant, especially a monocotyledon having high commercial value but difficult for transformation, the complementation test analysis of genom function, the construction of a genom library for the analysis of genom function, the efficient search for useful gene, etc. The vector can be produced by introducing a hygromycin-resistant gene having 35S promoter and nopalineteminator and free from EcoRI incision site in the gene into an EcoRI site of a T-DNA of a binary vector and inserting a  $\beta$ -glucuronidase gene and an Ri plasmid of Rhizobium into the vector.

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